				Time stamp
			DB	
		arch Text	USPAT	~~~~ /NB /()b ±V·±~ 1
ii mbor	Hits Se	arch Text ptu near3 "encryption key" rear3 "encryption key"	USPAT	
Number	0 ou	ptu near3 "encryption key" put near3 "encryption key" put near3 "encryption key"	USPAT	1 adaa /00 /06 10:10 1
1	0 1 011	nut nears are a leaver	USPAT	1 /08/06 10:10
1		tout nears are tion key"	USPAT	2003/08/06 10:38
l l	05 00	nitputting the encryption key"	USPAT	2003/08/06 10:44
1	1 1 "	outputting the encryption key" outputting encryption key"	USPAT	2003/08/06 10:44
1	1 "	outputting encryption key" transferring encryption key"	1	2003/08/06 10:44
1	. 1		USPAT	1 ~~~~ // Q /// LU:40 1
l l	8 "	713/180).CCLS. 713/180).CCLS.) and variable keys"	USPAT	1 0000 (08/08/05 10.3.1
.0	178 (713/180).CCLS.) and variable (713/180).CCLS.) and "generating keys"	USPAT	1 ~~~~ / \ \ \ / \ \ \ \ \ \ \ \ \ \ \ \
.1	65 ((/13/100) CCIS) and "generaling "	USPAT	2003/08/06 11:40
.2	7 (7713/18U).CCDD-7	uspat;	2003/00/
L3 \	346	380/44).CCLS.	US-PGPUB;	1
14	379	(380/44).CCLS.) and A-1	EPO; JPO;	1.
15	٠ ١ .	and hash	DERWENT;	1
	· ' '	A***	IBM TDB	12.54
		•	USPAT;	2003/08/06 11:54
	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		USPAL	1
	1	hashing near2 "master key"	US-PGPUB;	1
	4	hasning hears	EPO; JPO;	1
16	1		DERWENT;	1
	1	·	IBM TDB	2003/08/06 12:40
	1		ng USPAT;	1
	1	"master key" and hashing and "generati	US-PGPUB	; \
	43	"master key" and hashing	EPO; JPO	; \
17	43	keys"	DERWENT;	1
1 -	\	Keys	IBM_TDB	12.13
1	1		USPAT;	2003/08/06 13:13
1	1	" aumher"	USPAT	1
1	\	"generating keys" and "card number"	US-PGPUE	
	44	"generating ""	EPO; JPC	' [†] \
18	1		DERWENT	
1			IBM_TDB	2003/08/06 13:14
1	· I		USPAT;	1
1	1	lrovi"	IIS-PGPU	B; \
}	- \	"hashing master key"	EPO; JP	0; \
19	}		DERWENT	;
\ -·			IBM TOE	2003/07/29 07:55
1	1		 	2003/07/29 07:33
1		i management an	d US-PGPU	IB:
1	1	8 encryption and key and management an	EPO; J	20:
1	165	g encryption "smart card"	EPO; J	7.
\ -		"smart card	DERWEN'	1,
1			IBM_TD	B 2003/07/29 12:3
1	ł		uspat;	
ļ	1	(encryption and key and management a	us-PGP	UB;
l	1-	(encryption and key aster key"	EPO; J	PO; \
-	1 1	(encryption and key and master key" "smart card") and "master key"	DERWEN	IT;
ł	1		IBM TI	DB 1 107/20 07:5
	\		USPAT	DB 2003/07/29 07:5
\				12003/07/29 091
1	1	19 5604801.URPN. 8 ("4969188" "5111504" "5142578" 8 ("4969188" "5237611" "5265164"	USPAT	
1	Ì	19 5604801.08111.	. `	
\	\ ·	19 5604801.0km "5111504" "5142570 8 ("4969188" "5237611" "5265164" "5200999" "5513261").PN.	'	
\ -	}	"5200999" "5237011").PN. "5412721" "5513261").PN.		
1		1 - 14 0001" JJ100"		

	· · · · · · · · · · · · · · · · · · ·	•		1 0000 /00 /00 /00
-	79	("4186871" "4223403" "4268715"	USPAT	2003/07/29 09:46
		"4281215" "4288659" "4295039"		
·		"4302810" "4317957" "4423287"		
		"4438824" "4453074" "4529870"		
ļ		"4575621" "4578530" "4588991"		
		"4605820" "4630201" "4650975"	, ,	
		"4652698" "4656474" "4709137"]
		"4720859" "4727244" "4742351"]
		"4746788" "4799258" "4809326"		1
.		"4827508" "4837422" "4847803"		
		"4862501" "4866769" "4885788"		
		"4910774" "4926480" "4961142"		
		1 10 10 10 10 10 10 10 10 10 10 10 10 10	,	
		"4962531" "4965568" "4969188"		
		"4974193" "4984270" "5025373"		
		"5036461" "5093862" "5103079"		
		"5109152" "5111504" "5120939"		
'		"5144115" "5146499" "5175416"		
		"5182770" "5189287" "5204512"		.i
		"5206488" "5210795" "5212369"		· I
		"5220501" "5221838" "5223699"		
		"5224166" "5225664" "5227612"		
		"5227614" "5231569" "5237609"		
		"5253295" "5265164" "5267314"		
	1	"5276312" "5288978" "5317636"	•	
		"5327497" "5335276" "5365225"		
1		l · · · · · · · · · · · · · · · · · · ·		
	1	"5367150" "5379344" "5381478"		
		"5396558").PN.	I TODAE	2003/07/20 12:36
-	0	("JP-2000207831-\$.did.").PN.	USPAT	2003/07/29 12:36
-	. 0	JP-2000207831-\$.did.	USPAT	2003/07/29 12:36
-	594	(713/170-174).CCLS.	USPAT	2003/07/31 08:15
-	113	((713/170-174).CCLS.) and "smart cards"	USPAT	2003/07/31 08:18
-	. 204	((713/170-174).CCLS.) and "smart cards"	USPAT	2003/07/31 08:18
_	19	(((713/170-174).CCLS.) and "smart cards")	USPAT	2003/07/31 09:52
		and "master key"		
1_	3	("4926478" "5640455" "5666419").PN.	USPAT	2003/07/31 09:45
	1		USPAT	2003/07/31 10:29
_	0	((((713/170-174).CCLS.) and "smart cards")		2003/07/31 10.29
	_	and "variable key range"	} 	2002/07/21 10.22
_	0	(((713/170-174).CCLS.) and "smart cards")	USPAT;	2003/07/31 10:33
		and "variable key range"	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	ŀ
	1		IBM_TDB	
_	280	"smart card" and "master key"	USPAT;	2003/07/31 10:34
		•	US-PGPUB;	i
•		·	EPO; JPO;	
			DERWENT;	
	1		IBM TDB	
1_	1	(("smart card" and "master key") and	USPAT;	2003/07/31 10:35
1 -	i ¹	encryption) and "key range"	US-PGPUB;	2003, 07, 31 10.33
		encryption) and "key range"		
	Ì		EPO; JPO;	
	Ì		DERWENT;	
			IBM_TDB	0000/05/05 15 15
-	255	("smart card" and "master key") and	USPAT;	2003/07/31 10:43
	1	encryption	US-PGPUB;	
1			EPO; JPO;	
1			DERWENT;	
		· ·	IBM TDB	
_	142	(380/281).CCLS.	USPAT	2003/07/31 10:44
1_	30	I f	USPAT	2003/07/31 10:44
1_	13	(((380/281).CCLS.) and "smart card") and	USPAT	2003/07/31 11:04
1	13	"master key"	JULAI	= 333, 37, 32 12.04
			HEDATE .	2003/07/31 11:05
-	1	("5285134").PN.	USPAT	
-	1	("0285134").PN.	USPAT	2003/07/31 11:05
-	1	("0085134").PN.	USPAT	2003/07/31 11:07
-	0		USPAT	2003/07/31 11:09
-	1	("5694471").PN.	USPAT	2003/07/31 12:57
-	255	"smart card" and "master key" and	USPAT;	2003/07/31 13:00
		encryption	US-PGPUB;	
		_ 	EPO; JPO;	
1		,	DERWENT;	
1			IBM TDB	
1		<u> </u>	1	I

_	1	("smart card" and "master key" and	USPAT;	2003/07/31 13:00
•		encryption) and "key range"	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
			IBM_TDB	
_	255	("smart card" and "master key" and	USPAT;	2003/07/31 13:01
•		encryption) and key	US-PGPUB;	
	`		EPO; JPO;	
	ľ	·	DERWENT;	
	1		IBM_TDB	0000/07/01 12 01
-	0		USPAT;	2003/07/31 13:01
		encryption) and key) and "card number")	US-PGPUB;	
	1	and "group number"	EPO; JPO; DERWENT;	
	1	•	IBM TDB	
•	42	(("smart card" and "master key" and	USPAT;	2003/07/31 14:17
_	42	encryption) and key) and "card number"	US-PGPUB;	2003/07/31 14:17
		encryption, and key, and card number	EPO; JPO;	
			DERWENT;	
			IBM TDB	
_	63	"smart cards" and (key near3 range)	USPĀT;	2003/07/31 14:19
l .			US-PGPUB;	
		,	EPO; JPO;	
			DERWENT;	
		·	IBM_TDB	•
_	32	("smart cards" and (key near3 range)) and	USPAT;	2003/07/31 14:48
		"master key"	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
			IBM_TDB	0000/07/21 14 20
-	9	("4200770" "4218582" "4405829"	USPAT	2003/07/31 14:30
		"4850017" "4908861" "4918728"		
	140	"4924514" "4924515" "4941176").PN.	USPAT	2003/07/31 14:48
	142	(380/281).CCLS. ((380/281).CCLS.) and "smart card"	USPAT	2003/07/31 14:45
	30 345	(380/281).CCLS.) and Smart Card	USPAT	2003/07/31 14:55
_	43		USPAT	2003/07/31 14:56
_	1	("5809140").PN.	USPAT	2003/08/04 09:26
_	3	("5455953" "5604807" "5627892").PN.	USPAT	2003/08/04 09:23
_	1	("5590197").PN.	USPAT	2003/08/04 09:29
_	204	"master key" and encryption and decryption	USPAT;	2003/08/04 09:30
	1 .	and "smart card"	US-PGPUB;	
		·	EPO; JPO;	,
			IBM_TDB	0000/00/04 00:20
-	. 140	("master key" and encryption and	USPAT;	2003/08/04 09:30
	1	decryption and "smart card") and hash	US-PGPUB;	
		,	EPO; JPO; IBM TDB	
	7.	(("master key" and encryption and	USPAT;	2003/08/04 10:22
_	73	decryption and "smart card") and hash) and	US-PGPUB;	2003/00/04 10.22
		PIN	EPO; JPO;	
			IBM TDB	
_	16	"encryption key management system"	USPAT;	2003/08/04 10:24
	·		US-PGPUB;	
			EPO; JPO;	
			IBM_TDB	
_	548	"key range"	USPAT;	2003/08/04 10:25
		·	US-PGPUB;	
		·	EPO; JPO;	
			IBM_TDB	0002/00/04 10:03
_	1	"key range" and "smart card"	USPAT;	2003/08/04 10:27
			US-PGPUB; EPO; JPO;	
			IBM TDB	
_	187	"portable processor"	USPAT;	2003/08/04 10:28
_	10/	borrante brocessor	US-PGPUB;	
			EPO; JPO;	
			IBM TDB	
_	17	"portable processor" and "smart card"	USPAT; .	2003/08/04 10:39
			US-PGPUB;	
			EPO; JPO;	
			IBM TDB	
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			. —	
-	0	"variable key range"	USPAT; US-PGPUB;	2003/08/04 10:41
-	49	"encryption variable"	EPO; JPO; IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 11:39
			IBM TDB	
-	8	("3806874" "4601011" "4720860" "4800590" "4885778" "4998279" "5060263" "5163097").PN.	USPĀT	2003/08/04 11:14
	45		USPAT; US-PGPUB;	2003/08/04 11:43
_	10737	"smart cards"	EPO; JPO; IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 11:43
- :	270	"smart cards" and "master key"	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 11:45
-	204	("smart cards" and "master key") and encryption and decryption	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 13:41
-	. 1	(("smart cards" and "master key") and encryption and decryption) and "multiple cards"	IBM_TDB USPAT; US-PGPUB; EPO; JPO; IBM TDB	2003/08/04 13:43
-	204	("smart cards" and "master key") and encryption and decryption	USPAT; US-PGPUB; EPO; JPO;	2003/08/04 14:09
-	5	"master key" near3 generating near3 "encryption key"	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 13:53
	97	"master key" near3 generating near3 key	IBM_TDB USPAT; US-PGPUB; EPO; JPO; IBM TDB	2003/08/04 13:53
_	23	("master key" near3 generating near3 key) and "smart card"	USPĀT; US-PGPUB; EPO; JPO;	2003/08/04 13:58
-	55	("master key" near3 generating near3 key) and encryption and decryption	IBM_TDB USPAT; US-PGPUB; EPO; JPO; IBM TDB	2003/08/04 14:00
_	16	(("master key" near3 generating near3 key) and encryption and decryption) and "smart card"	USPAT; US-PGPUB; EPO; JPO; IBM TDB	2003/08/04 14:01
_	0	"portable processor" and "master key" and "encryption key"	USPĀT; US-PGPUB; EPO; JPO;	2003/08/04 14:40
-	1280	"encryption key" and "smart card"	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 14:40
_	9	(("encryption key" and "smart card") and "master key") and "control vector"	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 14:40
-	173	("encryption key" and "smart card") and "master key"	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/08/04 14:44
			IBM_TDB_	

		•		·
-	89	(("encryption key" and "smart card") and	USPAT;	2003/08/04 14:50
		"master key") and "decryption key"	US-PGPUB;	
			EPO; JPO;	
			IBM TDB	
l _	174	"generating encryption keys"	USPAT;	2003/08/04 14:51
	1/4	generating energytion keys	US-PGPUB;	
1			EPO; JPO;	
			IBM TDB	
1	1000	III. I Land Harris Harr		2003/08/04 14:51
-	18506	"generating encryption keys" ans "master	USPAT;	2003/08/04 14:51
		key"	US-PGPUB;	
			EPO; JPO;	
			IBM_TDB	
-	18	"generating encryption keys" and "master	USPAT;	2003/08/04 14:59
		kev"	US-PGPUB;	
		<u> </u>	EPO; JPO;	
			IBM TDB	
1_	737	"smart card" and "decryption key"	USPĀT;	2003/08/04 15:26
	.'3'	Smart cara and accryption noy	US-PGPUB;	2000, 00, 00
			EPO; JPO;	
				-
			IBM TDB	2003/08/04 15:31
-	105	("smart card" and "decryption key") and "	USPAT;	2003/08/04 15:31
		master key"	US-PGPUB;	
1			EPO; JPO;	
			IBM_TDB]
-	1	("5602918").PN.	USPĀT	2003/08/04 15:40
1 -	14	("4649233" "4862501" "4890323"	USPAT	2003/08/04 15:31
	1	"5048085" "5202922" "5237611"		
		"5272754" "5345506" "5347580"		
1		3272734		
		"5491750" "5497411").PN.	II C D A M	2002/09/04 15:49
-	34		USPAT	2003/08/04 15:49
1		"decryption keys" and "smart cards"		0000/00/04 15 40
-	15	(generating and "encryption keys" and	USPAT	2003/08/04 15:49
		"decryption keys" and "smart cards") and		
		"master key"		
-	322	generating and "encryption keys" and	USPAT;	2003/08/04 15:49
		"decryption keys" and "smart cards"	US-PGPUB;	
			EPO; JPO;	·
			DERWENT;	
			IBM TDB	
ļ.	64	(generating and "encryption keys" and	USPAT	2003/08/04 16:02
1	04	"decryption keys" and "smart cards") and	002777	2000, 00, 01 2000
		"decryption keys and small calds) and		
		"master key"		2003/08/04 16:37
-	60	"encryption key management" and "smart	USPAT;	2003/08/04 16:37
		card"	US-PGPUB;	
		•	EPO; JPO;	
1			DERWENT;	1
1			IBM_TDB	
-	1	("5809140").PN.	USPAT	2003/08/04 16:40
-	3		USPAT	2003/08/04 16:38
_	142		USPAT	2003/08/04 16:41
_	58	(380/284).CCLS.	USPAT	2003/08/04 16:41
1_	3	((380/284).CCLS.) and "smart cards"	USPAT	2003/08/04 16:43
1 -			USPAT	2003/08/04 16:44
1 -	237	380/278	USPAT	2003/08/04 16:45
- .	150			2003/08/04 16:59
-	22	((380/278).CCLS.) and "master key"	USPAT	
	4	(((380/278).CCLS.) and "master key") and	USPAT	2003/08/04 16:45
1		"smart card"		0000/00/00 55
-	12		USPAT	2003/08/04 16:59
-	54		USPAT;	2003/08/04 17:00
1	1		US-PGPUB;	1
1		, '	EPO; JPO;	1 ·
	•	,	DERWENT;	
			IBM TDB	
1_	3	"multiple smart card" and "master key"	USPAT;	2003/08/04 17:00
1	3	marciple small data and master key	US-PGPUB;	=====================================
		,		
			EPO; JPO;	
			DERWENT;	
			IBM_TDB	0000/00/05 11 15
	1	("5311595").PN.	USPAT	2003/08/05 14:48

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_	18	"master key" and "smart card" and	USPAT;	2003/08/05 14:57
	1	(generating near3 "decryption keys")	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
			IBM TDB	
-	1	("5311595").PN.	USPAT	2003/08/06 10:14
-	0	"hashing the master key"	USPAT;	2003/08/05 17:15
			US-PGPUB;	
<u> </u>			EPO; JPO;	
			DERWENT;	
		•	IBM TDB	
_	6	hashing near3 ("master key")	USPĀT;	2003/08/05 17:15
			US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
			IBM TDB	